

Date: Friday, 9/14/2007 2:01:57 PM
 User: Kim Johnston

Process Sheet

Customer	CU-DAR001 Dart Helicopters Services	Drawing Name	X-TUBE EXTRUSION
Job Number	34688		
Estimate Number	11108		
P.O. Number	N/A	Part Number	D6008180 ✓
This Issue	9/14/2007	S.O. No.	N/A
Prsht Rev.	NC	Drawing Number	D6008 REV A
First Issue	N/A	Project Number	N/A
Previous Run	25667	Drawing Revision	A
Written By		Material	N/A
Checked & Approved By	<u>9/14/09.17</u>	Due Date	1/30/2008
Comment	Est Rev.C 04.06.15 Added tolerance to Step 2 KJ/JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	PG	PURCHASING
	Comment: PURCHASING	
	Issue P/O: <u>4611</u>	<u>CLO7/09/18</u> (7)
	a) Order as per Dwg D6008	
	b) Material: 3.250 x 0.438 wall 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9 or QQ-A-200/11) seamless aluminum tube	
	c) Minimum ultimate tensile strength = 77 ksi	
	d) Minimum tensile yield strength = 66 ksi	
	e) Tolerance are per ASTM B210 (see details on Dwg D6008)	
	f) Material certification required	
2.0	D6008180P	Crosstube extrusion
	Comment: Qty.: 1.0000 Each(s)/Unit Total : 7.0000 Each(s)	
	Crosstube extrusion	
3.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1	
	Receive & Inspect For Transit Damage	
	Ensure material certification is attached	<u>8/01/03</u> (8)
4.0	QC6	DIMENSIONAL CHECK
	Comment: DIMENSIONAL CHECK	
	Ensure Material certification comply to Dwg D6005	<u>08/01/04</u> <u>x8</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA:  Date: 2010/15
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services		Drawing Name: X-TUBE EXTRUSION
Job Number: 34688		Part Number: D6008180
Job Number:		
Seq. #:	Machine Or Operation:	Description :
5.0	HAND FINISHING1 	HAND FINISHING RESOURCE #1 
Comment: HAND FINISHING RESOURCE #1 Chemical Conversion Coat as per QSI 005 4.1		
6.0	QC3 	INSPECT POWDER COAT/CHEMICAL CONVERSION <i>208015-8</i> 
Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION		
7.0	PACKAGING 1 	PACKAGING RESOURCE #1 
Comment: PACKAGING RESOURCE #1 Identify and Stock Location: L G		
8.0	QC21 	FINAL INSPECTION/W/O RELEASE 
Comment: FINAL INSPECTION/W/O RELEASE		
Job Completion		 <i>W 08.06.15</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

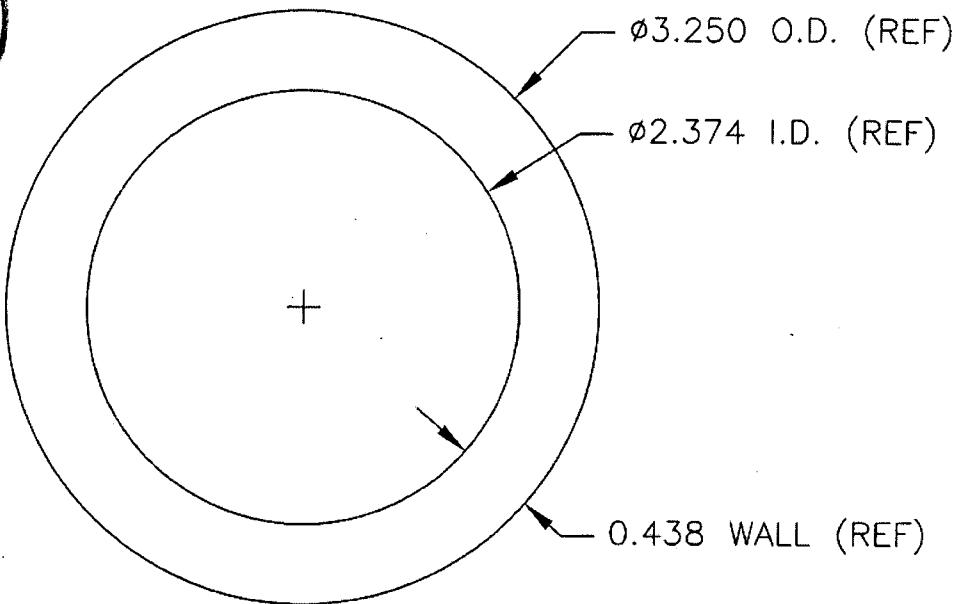


COPY ISSUE
REV. A

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D6008
DATE		TITLE CROSSTUBE MATERIAL
A	00.11.17	SCALE 1:1 NEW ISSUE

SPECIFICATION CONTROL DRAWING

RELEASED
00.11.24



NOTES

1) D6008-XXX CROSSTUBE
 |
 LENGTH

WHERE XXX IS LENGTH IN INCHES
EG. 180" LONG TUBE: D6008-180

2) MATERIAL: 3.250 OD x 0.438 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/8 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi

3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:
O.D.: ± 0.008 MEAN (± 0.016 INCLUDING OVALITY)
WALL: ± 0.020 MEAN (± 0.044 INCLUDING ECCENTRICITY)
LENGTH: XXX $+0.125/-0.000$
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH

4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.

5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

SHOP COPY
RETURN OR
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDERED
NO 34688

A TUBES LIMITED

ley Road, Redditch, Worcestershire B98 7HN, England
Phone (01527) 484500, Facsimile (01527) 484501

Approved Certificate According to EN10204:2004 3.1

For all Customer and 3rd Party approvals
visit www.batubes.com

No. C/151438/1

AEROSPACE LIMITED BERDEEN STREET ESBURY B10 WA	Your Order No PO00004611
	Your Part No D6008-180P
	Our Order No 94945/6
	Packing Note No 151438
	Date 30/11/07
	Packages 1 CASE

Other Tests Passed	
Specification 7075 T6 WW-T-700/7B	

Description
LESS DRAWN TUBE 3.250 INS O/D .438 INS W/T 7075 Alloy
.100.00 inches

Nett Weight Lbs		Tensile Test					Chemical Analysis %										H cc/ 100 gm	
		Test No	0.2% Proof Stress KSI	Tensile Strength KSI	% Elongation 2in		Heat or Cast No	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Zr		
569		331215 LO	68.9	79.0	14		2N268	.07	.29	1.41	.03	2.39	.21	.01	5.79	.01	.03	.13

CASE NO.12977

ALLOY MELTED IN THE UNITED KINGDOM

id Inspection Representative



Layton For and on behalf of BA Tubes

England No. 3981395
Office: The Victoria, 150-182 Harbour City
Balford, M50 3SP, England.
ation No. GB 668 2142 26



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